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TITLE: System, method, and article of manufacture for increasing link bandwidth utilization in a high speed digital network

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PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	5274643	December 1993	Fisk	370/238
<input type="checkbox"/>	5313454	May 1994	Bustini et al.	370/13
<input type="checkbox"/>	5448564	September 1995	Thor	370/392
<input type="checkbox"/>	6148000	November 2000	Feldman et al.	370/397
<input type="checkbox"/>	6237029	May 2001	Master et al.	709/217

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	CLASS
0706297	April 1996	EP	

OTHER PUBLICATIONS

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Blake et al, ARIS Support for LAN Media Switching, Mar. 1997, IETF Internet-Draft (draft-blake-ariss-lan-00.txt).

ART-UNIT: 2663

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ABSTRACT:

A system, method and article of manufacturing for increasing link bandwidth occupation in a high speed packet switching digital network by enabling merging the traffics provided by different source users over several network node entry ports and to be propagated throughout network paths toward a same destination network port. To that end, at network ingress, the original packets provided by said source users and entering the network, are encapsulated with a so-called Single Sided Virtual Channel (SSVC) header including a Data Link Connection Identification (DLCI) field. Then, the packets provided by said source users and entering a given network node along their predefined path are monitored. Said packets SSVC headers DLCI fields are loaded with a same Virtual Channel number, whereby the corresponding traffics are being merged into a same channel, down to the destination network node. Then, the packets in said destination node are de-encapsulated from said SSVC header.

24 Claims, 8 Drawing figures

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